AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 8, lines 12–21 with the following amended paragraph:

Five tabs are also illustrated in FIG. 3: Factors **307**, Responses **309**, Cases **311**, Blocks ~~317~~313, and Experiments **315**. In FIG. 3, the table shown (headed by "Factor Name") **317** corresponds to when the Factors tab **307** is selected. A factor is a parameter to be adjusted between experiments while running the DOE plan. In other words, factors can be recipe parameters of the tool. The user can select a set of factors from a field of factors. As the example depicted in FIG. 3 shows, the factors can be a baseline time **319**, center time **321**, edge time **323**, etc. These are the parameters relating to an oxide CMP profiler tool. For this set of factors, their units are in milliseconds. The term "LSL" **327** means the lower specification limit, and the term "USL" **329** means the upper specification limit. After selecting the factors, the user can enter the values for the LSL and USL. The user can specify if the factors are to be time-based or constant value.

Please replace the paragraph on page 13, lines 8-15 with the following amended paragraph:

More specifically, the Formula type window **801** allows the user to select one of four formula types: linear without interactions **803**; linear with interactions **805**; quadratic without interactions **807**; and quadratic with interactions ~~809~~811. The equations for these formulas are similar to the equations describe above in connection with FIG. 5. In additions to the four formulas, the user is allowed to enter a more general time-based or non-time-based linear-in-parameters model structure by selecting a "Use Template" option **813**. Using this option, the user then enters terms **817** and designates whether the terms are time-based in a Time-Base designating field **819**.

Please replace the paragraph on page 20, lines 6-13 with the following amended paragraph:

In each tool, the APC **1205** communicates with a specific tool and the APC can be accessed by the APC console **1205** or the operator console ~~1205~~1209 remotely. The APC connects to the tool via the connection tools. With respect to the APC, at least some of its various features are also described in U.S. Patent Publication No. 2003-0049376, matured from

U.S. Non-Provisional Application No. 10/174,377, entitled as "FEEDBACK CONTROL OF SUB-ATMOSPHERIC CHEMICAL VAPOR DEPOSITION PROCESSES," filed on June 18, 2002, which is incorporated herein by reference in its entirety.